

SENTINEL LANDSCAPES 2016 REPORT

U.S. Department
of Agriculture
U.S. Department
of Defense
U.S. Department
of the Interior



INTRODUCTION

The U.S. Departments of Agriculture, Defense, and the Interior established the Sentinel Landscapes Partnership to better serve areas of the United States where working and natural lands converge with national defense facilities. The Sentinel Landscapes partners coordinate efforts in locations where their priorities overlap. This allows them to leverage their collective resources and expertise to accomplish shared goals on the ground. By participating in Sentinel Landscapes the:

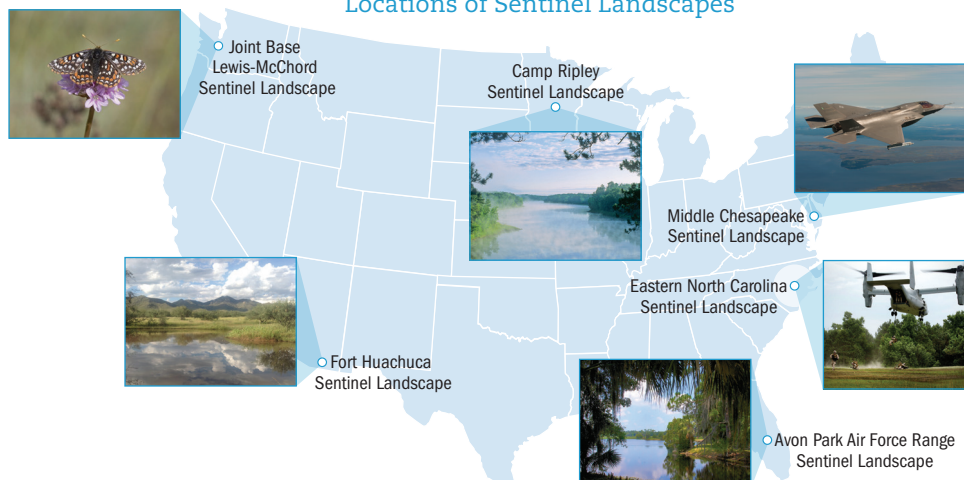
- ★ Department of Agriculture (USDA) provides technical and financial assistance to help more agricultural producers and landowners protect their land and install conservation practices and activities;
- ★ Department of Defense (DoD) more efficiently reduces land-use conflicts and natural resource issues around military installations to ensure maximum flexibility for testing, training, and operational activities; and,
- ★ Department of the Interior (DOI) accelerates the protection of natural resources and restoration of important habitat for wildlife.

Since the three Departments initiated the Partnership in 2013 through a Memorandum of Understanding, strides have been made to define, advance, and institutionalize Sentinel Landscapes. The partners coordinate through the Federal Coordinating Committee (FCC). Representatives from each Department make up the FCC. They have selected six locations across the United States as Sentinel Landscapes.

These locations are:

- ★ Joint Base Lewis-McChord, Washington
- ★ Fort Huachuca, Arizona
- ★ Middle Chesapeake, Maryland
- ★ Avon Park Air Force Range (AFR), Florida
- ★ Camp Ripley, Minnesota
- ★ Eastern North Carolina, North Carolina

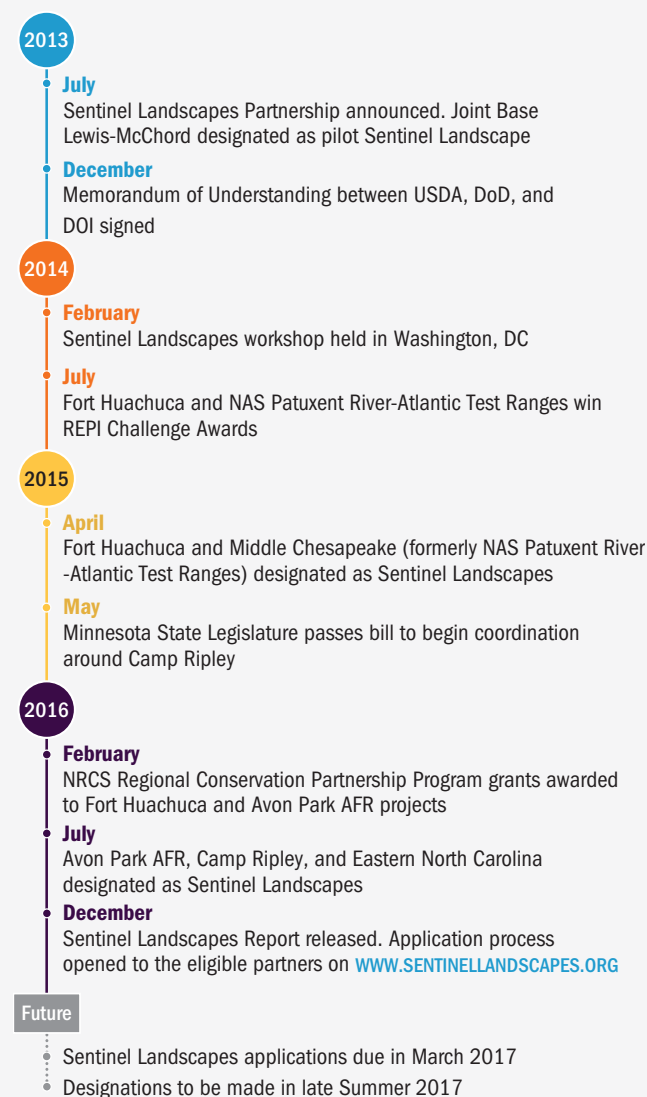
Locations of Sentinel Landscapes



Among the six Sentinel Landscapes, priorities, engagement, and accomplishments differ dramatically, but all locations fulfill three core characteristics of a Sentinel Landscape defined by the FCC. These include:

1. A Sentinel Landscape must identify the military installation(s) or range(s) that anchors the landscape. The mission of these anchor installations and ranges benefits from preserving compatible land uses and promoting conservation on the lands in the Sentinel Landscape.
2. A defined landscape is associated with the anchor installation's "mission footprint" and conservation and working lands priorities. Within this landscape, government agencies, non-governmental organizations (NGOs), and other partners coordinate their programs in support of ranching, farming, forestry, and conservation in partnership with the landowners in the landscape.

Evolution of the Sentinel Landscapes Partnership



3. A coordinated and collaborative implementation strategy or plan providing incentives and affording recognition to those landowners who participate in the Sentinel Landscape. Landowners participate by adopting and sustaining land uses compatible with the military mission while providing tangible benefits to conservation and working lands within the defined landscape.

Building on these basic elements, each Sentinel Landscape works at the local level to identify location-specific desired outcomes that serve the needs of the local community while fulfilling the missions of USDA, DoD, and DOI. Implementing programs that achieve these on-the-ground desired outcomes is the goal of all Sentinel Landscapes. At the local level, the partnership capitalizes on its broad, diverse, and engaged stakeholder group to leverage resources and expertise to better pursue grants and awards.

At the national level, the FCC works to eliminate barriers and provide other support to the local partnership. Though no dedicated funding necessarily accompanies designation, individual partner agencies may choose to provide program-specific funding or give priority consideration in existing funding processes to landowners within a designated landscape.

Participating agencies may recognize the benefit of Sentinel Landscapes designations through actions that include:

- ★ Providing appropriate priority consideration for landowners within Sentinel Landscapes under existing funding guidance; and
- ★ Encouraging landowners and other eligible entities within designated Sentinel Landscapes to apply for federal assistance under the guidance and timelines of each of the individual federal landowner assistance programs identified as aligned with the Sentinel Landscapes Partnership.

This Report reviews the achievements of Sentinel Landscapes designated between 2013 and 2015—Joint Base Lewis-McChord, Fort Huachuca, and Middle Chesapeake. Then the report previews what the Sentinel Landscapes designated in 2016—Avon Park AFR, Camp Ripley, and Eastern North Carolina—will seek to accomplish in the coming years. The Report will also introduce the Sentinel Landscapes nomination application.

Sentinel Landscapes allow USDA, DoD, DOI, and local partners to achieve more, together, in places that are of shared interest. By working together, Sentinel Landscapes increase the capacity of each participant.

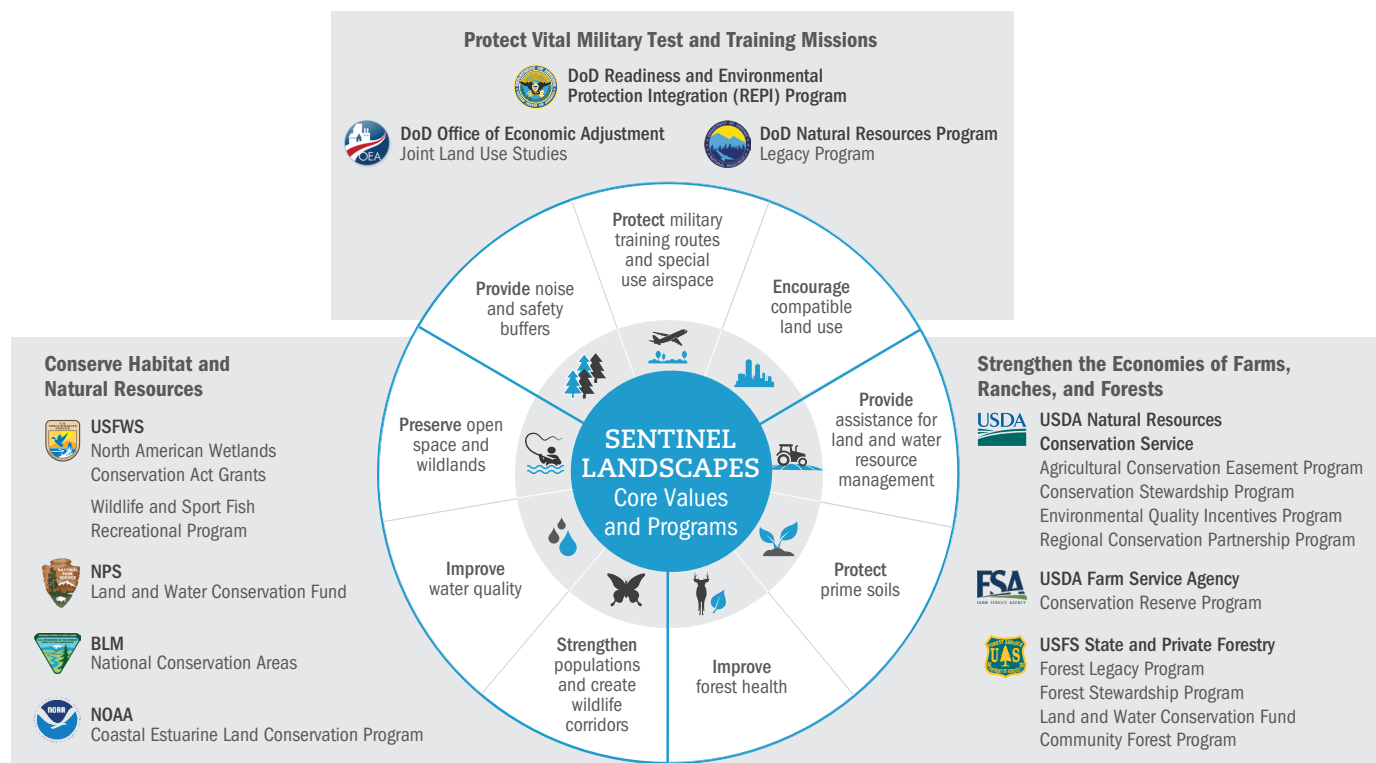
FEDERAL PROGRAM INVOLVEMENT

A key driver of the Sentinel Landscapes Partnership is to better align Federal programs to maximize resources and benefits provided to local landowners and stakeholders. In doing so, USDA, DoD, and DOI will succeed in making more efficient use of tax dollars, accomplish more on the ground with less resources, and better coordinate ongoing and planned interagency efforts.

To help achieve these goals, local Sentinel Landscape partnerships together with the FCC have been tracking Federal programs and resources available to each landscape. To date, the most active and effectively leveraged Federal programs at designated Sentinel Landscapes include:

- ★ DoD Readiness and Environmental Protection Integration (REPI) Program
 - ▶ The REPI Program protects military missions by helping remove or avoid land-use conflicts near installations and addressing regulatory restrictions that inhibit military activities. The REPI Program helps to preserve agricultural and natural lands around military installations that provide benefits to mission.
- ★ USDA Natural Resources Conservation Service (NRCS) Regional Conservation Partnership Program (RCPP)
 - ▶ RCPP promotes coordination between NRCS and its partners to deliver conservation technical and financial assistance to producers and landowners through partnership agreements, conservation program contracts or easements. RCPP projects achieve regional natural resource goals while also meeting complementary local conservation priorities.
- ★ USDA NRCS Conservation Stewardship Program (CSP)
 - ▶ CSP provides technical and financial assistance to agricultural producers for implementing conservation management activities related to a variety of key resource concerns, including soil and water quality and wildlife habitat, on cropland, pasture, rangeland and forestland, in contracts that are 5 years long.
- ★ USDA NRCS Environmental Quality Incentives Program (EQIP)
 - ▶ EQIP provides technical and financial assistance to agricultural producers for implementing conservation practices related to a variety of key resource concerns, including soil and water quality, watershed protection, and wildlife habitat, in contracts up to 10 years long.

Significant Federal Programs involved in Sentinel Landscapes

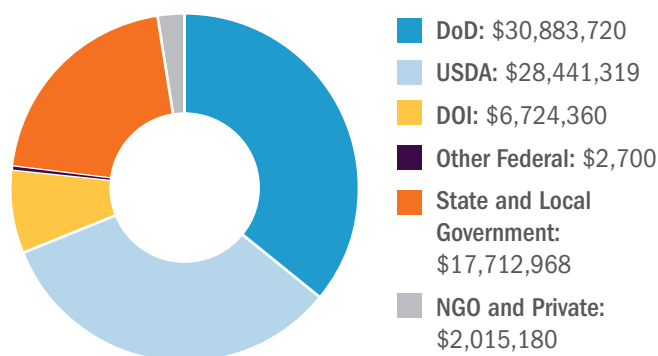


- ★ **USDA NRCS Agricultural Conservation Easement Program (ACEP)**
 - ▶ This program provides financial and technical assistance to help conserve agricultural lands, including cropland, rangeland, grassland, pastureland, wetlands, and nonindustrial private forest land.
- ★ **USDA U.S. Forest Service (USFS) Forest Legacy Program**
 - ▶ The Forest Legacy Program targets ecologically and economically important forest lands that states identify for protection.
- ★ **DOI U.S. Fish and Wildlife Service (USFWS) North American Wetlands Conservation Act (NAWCA) Grants**
 - ▶ NAWCA administers a competitive grant program to increase bird populations and wetland habitat, while supporting local economies and American traditions such as hunting, fishing, family farming, cattle ranching, and birdwatching.

Other programs that have the potential to support Sentinel Landscapes include:

- ★ USFWS Wildlife and Sport Fish Recreational Programs funds
- ★ USDA Farm Service Agency (FSA) Incentives and Conservation Program grants
- ★ National Oceanic and Atmospheric Administration (NOAA) Coastal Estuarine Land Conservation Program grants
- ★ Department of Transportation (DOT) Recreational Trails Program awards
- ★ Environmental Protection Agency (EPA) Wetlands Program Development Grants
- ★ DoD Legacy Resource Management Program awards
- ★ DOI/USDA Land and Water Conservation Fund
- ★ EPA Multipurpose Grants to States and Tribes

Total Funding by Partner



Total: \$85,780,247

Depending on the circumstances of each Sentinel Landscape, there will be other Federal and state programs with resources to support a particular landscape.

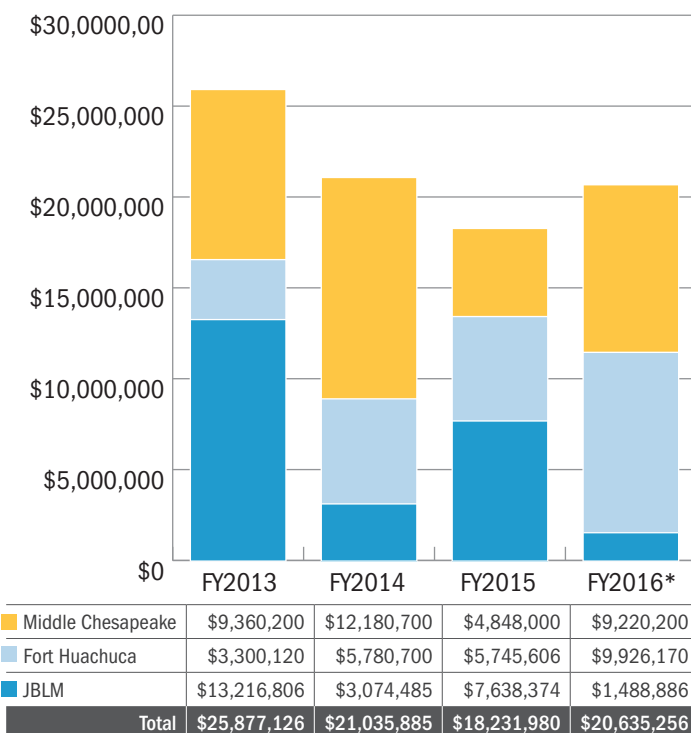
PARTNERSHIPS IN ACTION

In four years, Sentinel Landscapes in Washington, Arizona, and Maryland have worked to advance goals crafted by each local partnership and approved by the FCC. Because Sentinel Landscapes are driven by local partners, each location's desired goals differ dramatically.

Over \$85 million has been invested in these three locations, with additional commitments pledged to the three new Sentinel Landscapes in Florida, Minnesota, and North Carolina. The table below shows total investment within each Sentinel Landscape since the beginning of the Sentinel Landscape Partnership in FY 2013.

A significant portion of the total investment in Sentinel Landscapes comes from state and local governments, whose enthusiastic support and commitment to the concept of the Sentinel Landscapes initiative has helped drive the Partnership. To date, state and local governments have contributed over \$17.7 million of the funds detailed above.

Total Funding by Landscape

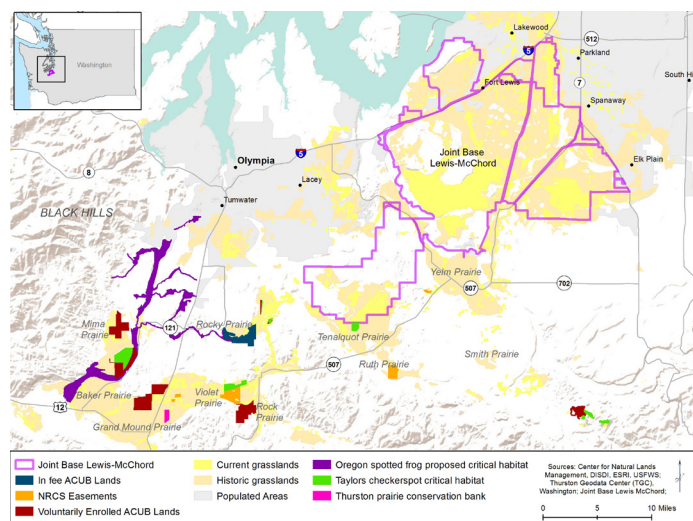


*FY16 funding includes commitments through August 29, 2016.

— Robert Bonnie, USDA Under Secretary for Natural Resources and Environment

The pilot Sentinel Landscape at Joint Base Lewis-McChord in Washington is moving conservation forward through a series of unique initiatives designed to restore lost native South Puget Sound prairie land on private pasture lands, recover species listed under the Endangered Species Act (ESA), and relieve habitat protection burdens on Joint Base Lewis-McChord.

Joint Base Lewis-McChord Sentinel Landscape



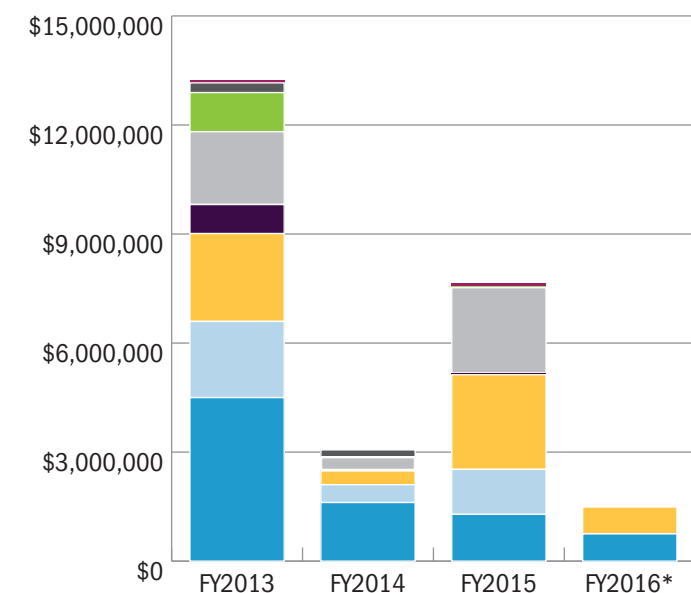
Goal	Status
Goal #1 Protect annual use of 63,000 acres of training area, including 7,119 acres of impact area, 86 ranges and mortar points, 13 drop zones, and 2 airfields.	Current draft Biological Opinion for JBLM for federal listings of three species allows the training mission to continue with restrictions.
Goal #2 Work with landowners to develop and implement pastureland conservation plans.	1,053 acres are protected with agricultural conservation easements.
Goal #3 Protect the diminishing South Puget Sound prairie habitat and promote the recovery of threatened and endangered species, specifically the Taylor's checkerspot butterfly, streaked horned lark, and Mazama pocket gopher.	<ul style="list-style-type: none"> ★ To date (2006-2016), 1,035 acres newly conserved (in fee & easement), added to 3,615 acres already in conservation status. ★ Two checkerspot reintroductions are underway. ★ An agreement to provide formal ESA credits for continuing ACUB actions is being negotiated
Goal #4 Initiate demonstration projects that exemplify dual benefit actions (ex. Agriculture and both the Mazama pocket gopher and the Spotted Frog)	Project and grant proposals underway.

A close-up photograph of a butterfly with black, orange, and white patterned wings perched on a purple flower. The butterfly's wings are spread, showing a complex pattern of orange spots and white markings on a black background. The flower is a vibrant purple with multiple petals. The background is a soft, out-of-focus green, suggesting a natural habitat.

SENTINEL LANDSCAPES: 2016 REPORT | Joint Base Lewis-McChord

Joint Base Lewis-McChord Sentinel Landscape partners are engaging in multiple efforts to reverse the trend of habitat and species loss, land use conversion, and training restrictions. The DoD REPI Program, Army Compatible Use Buffer (ACUB) Program, USDA NRCS, and other partners have worked to protect open space and working lands outside of the installation's fence lines. Over 1,000 acres of ranch lands have been protected through NRCS' Agricultural Conservation Easement Program, and an additional 14,000 acres are enrolled by landowners in restoration and conservation technical assistance programs. An additional 2,000 acres of high-development potential lands within the Sentinel Landscape have been conserved to protect Joint Base Lewis-McChord's training mission. The protected lands are a key part of the installation's joint effort with Thurston County to complete a Habitat Conservation Plan, which aims to quantify credits and debits for prairie impacts and protection or restoration.

Joint Base Lewis-McChord: Total Funding by Partner



Other Private (includes volunteers)	\$58,611	\$12,903	\$67,953	\$-
CNLM	\$267,358	\$187,744	\$38,149	\$-
Local Government	\$1,075,000	\$10,000	\$10,000	\$-
State	\$2,002,958	\$358,456	\$2,350,983	\$-
Other Federal	\$2,700	\$-	\$-	\$-
NRCS	\$797,400	\$24,019	\$42,500	\$-
USFWS	\$2,416,779	\$378,163	\$2,603,651	\$738,886
U.S. Army	\$2,096,000	\$490,200	\$1,236,338	\$-
DoD REPI Program	\$4,500,000	\$1,613,000	\$1,288,800	\$750,000
Total	\$13,216,806	\$3,074,485	\$7,638,374	\$1,488,886

*FY16 funding includes commitments through August 29, 2016.

Joint Base Lewis-McChord: Partners

Army Compatible Use Buffer Program
 Capitol Land Trust
 Center for Natural Lands Management
 DoD REPI Program
 DOI U.S. Fish and Wildlife Service
 Evergreen State College
 Nisqually Land Trust
 Northwest Rangeland Trust
 Oregon Zoo
 South of the Sound Community Farmland Trust
 Thurston County
 University of Washington
 USDA NRCS
 Washington Department of Corrections
 Washington Department of Fish and Wildlife
 Washington Department of Natural Resources
 Washington Department of Veterans Affairs
 Washington State University Extension
 Wolf Haven International

Negotiations continue to complete a Biological Opinion to relieve training restrictions arising from the federal listings of three species. These efforts seek to build on the previous success of partners within the Sentinel Landscape in recovering the Mardon Skipper through preemptive conservation, allowing for it to be removed from the ESA candidate list.

By working with landowners to develop and implement pastureland conservation plans, Sentinel Landscape partners will help to recover threatened and endangered species, bolster local agriculture, and relieve burdens on Joint Base Lewis-McChord.

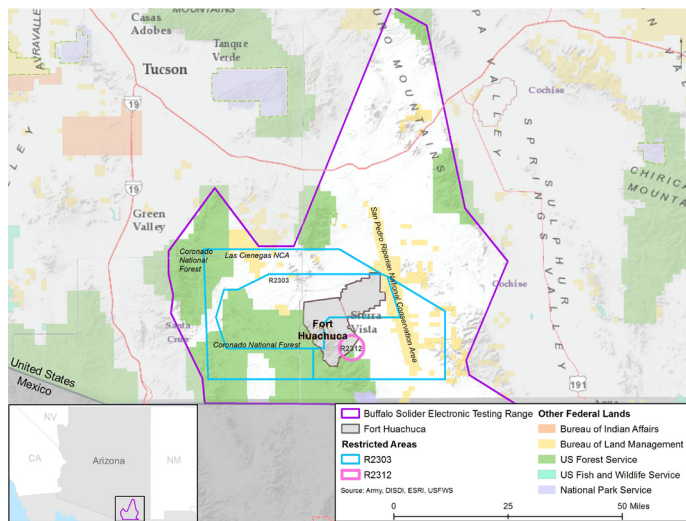
“The Sentinel Landscapes Partnership is an important conservation tool benefiting some of the nation’s most significant working landscapes and wildlife habitat... we can preserve military readiness while also protecting important landscapes and wildlife habitat.”

— Michael Bean, DOI, Principal Deputy Assistant Secretary for Fish and Wildlife and Parks

FORT HUACHUCA

Finding unconventional partners working together is not uncommon in rural southern Arizona, home to the Fort Huachuca Sentinel Landscape. The region's long history of cattle ranching, distance from major urban centers, and unique high-altitude and mountainous geography fostered a deep tradition of coming together to solve common problems for mutual benefit. This tradition continues today as the Fort Huachuca Sentinel Landscape, established in 2015, comes together to tackle critical regional issues of water quantity and quality, long-term agricultural viability, native habitat restoration, and military mission protection.

Fort Huachuca



Funding acquired through the DoD REPI Program has helped conserve 11,196 acres under Fort Huachuca's most important and heavily used airspace, lessening the probability of extreme population growth and incompatible development under Fort Huachuca's Buffalo Soldier Electronic Test Range. Additionally, funds from the Arizona Military Installation Fund have also helped prevent the drilling of up to 741 new wells and the preservation of twenty acres of wetlands. These activities have created 2,827 acre-feet of water conservation credits for Fort Huachuca and significantly lessened the burden on groundwater within the Upper San Pedro River watershed.

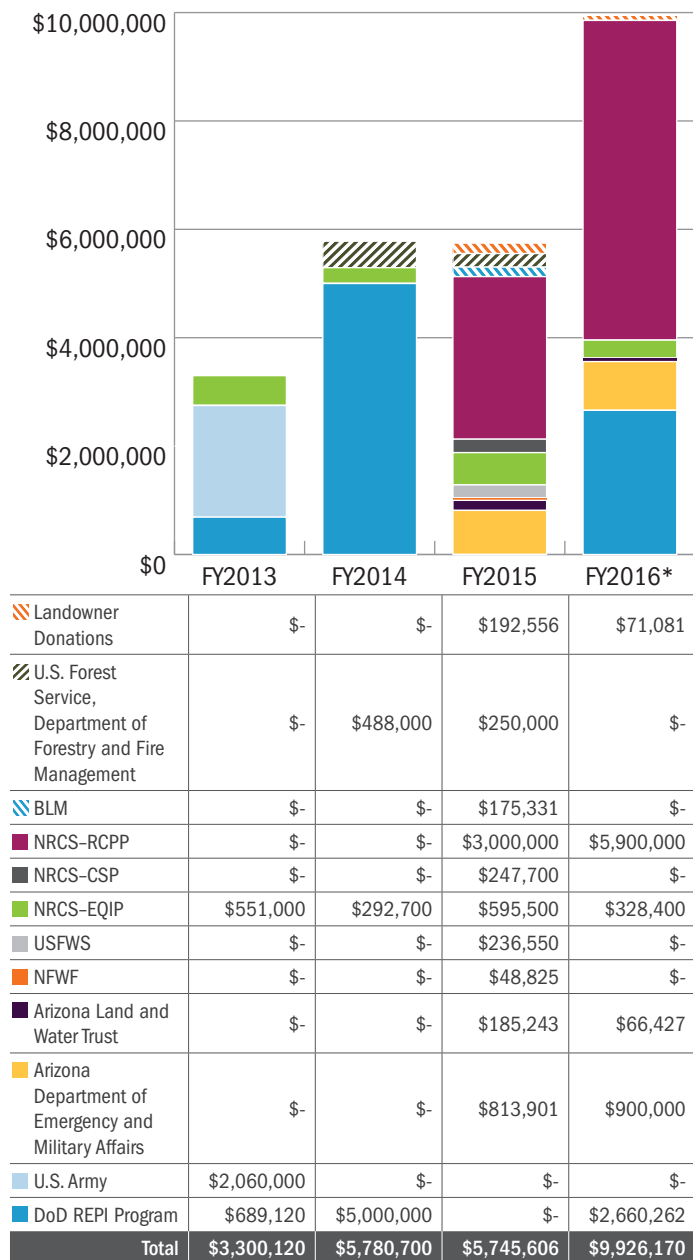
Noxious and invasive species like salt cedar and mesquite negatively impact cattle ranching and fiber production operations, drain precious water sources that recharge groundwater, and impede efforts to restore native grasslands which support threatened and endangered species. However, funding acquired from partners is helping to protect, manage,

and restore lands within the Sentinel Landscape in support of each partner's individual goals and the partnership's shared vision. Since 2015, this funding has been leveraged to protect 341 acres of a historic working farm and restore 90,000 acres of private lands that are prime habitat for rare and native grasslands and compatible with Arizona's food and fiber production. Important wildlife habitat has additionally been restored on over ten acres of wetlands, over 200 acres of upland, and along almost 1 ½ miles of stream targeted for its significance to threatened and endangered species. Within Las Cienegas National Conservation Area, an additional 1,269 acres have been restored and over 600 acres of forested land conserved adjacent to the Coronado National Forest.

Fort Huachuca: Goals and Outcomes

Goal	Status
Goal #1 Protect annual dispatch of over 160,000+ sorties from the R-2303 Military Airspace and the diverse capabilities of the Buffalo Soldier Electronic Testing Range.	11,196 acres conserved under R-2303 airspace to date.
Goal #2 Protect historic and economically important ranches and farms that sustain Arizona's food and fiber production and contain rare, native grassland habitat.	341 acres of a historic working farm in the Sentinel Landscape Focus Area conserved; 90,000 acres of private land within Sentinel Landscape Focus Area restored; 3 active contracts to provide technical assistance to farmers to implement best management practices for land and water resources; 36 active or completed contracts to help producers and landowners plan and implement conservation and land management practices.
Goal #3 Efficiently achieve wildlife habitat restoration on private lands.	10.4 acres of wetlands, 211.4 acres of upland, and 1.32 miles of stream restored in Sentinel Landscape Focus Area.
Goal #4 Restore lands within or near Las Cienegas National Conservation Area and San Pedro Riparian National Conservation Area.	1,269 acres restored in LCNCA (mostly within R-2303 airspace).
Goal #5 Conserve "forested" lands and lands adjacent to or within Coronado National Forest.	612 acres conserved within Sentinel Landscape Focus Area.
Goal #6 Protect water quantity and quality in the Upper San Pedro River watershed by preventing new well drilling and promoting efficient water technologies on agricultural lands.	Drilling of up to 741 new wells prevented (with actual acreage conserved), 20 acres of wetlands restored and water conservation credits created, and 2,827 acre feet of water conservation credits created.

Fort Huachuca: Total Funding by Partner



*FY16 funding includes commitments through August 29, 2016.

All activities have occurred within the geographic basin that creates Fort Huachuca's Buffalo Soldier Electronic Test Range, which add additional buffers and provide further protection to the installation's unique mission and to the longevity of the region's key economic driver.

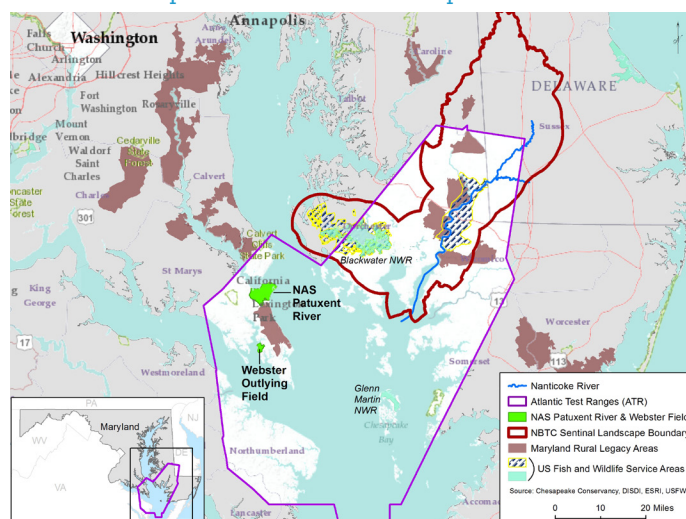
Fort Huachuca: Partners

Arizona Antelope Foundation
 Arizona Department of Emergency and Military Affairs
 Arizona Game and Fish Department
 Arizona Land and Water Trust
 Arizona State Department of Forestry and Fire Management
 Borderlands Restoration
 Desert Landscape Conservation Cooperative
 DoD REPI Program
 DOI Bureau of Land Management
 DOI U.S. Fish and Wildlife Service
 Fort Huachuca
 Hereford Natural Resources Conservation District
 National Fish and Wildlife Foundation
 Santa Cruz Natural Resources Conservation District
 Sky Island Alliance
 University of Arizona Cooperative Extension
 USDA NRCS
 USDA Forest Service

MIDDLE CHESAPEAKE

The Chesapeake Bay is one of America's treasures, beloved for its natural beauty and valued for its economic productivity and ecological vitality. These factors alone make the Chesapeake a hotspot for initiatives of all kind, but the additional presence of the Navy's premier aircraft research, development, testing, and evaluation locations brought diverse stakeholders together in 2015 to form the Middle Chesapeake Sentinel Landscape (formerly NAS Patuxent River-Atlantic Test Ranges Sentinel Landscape).

Middle Chesapeake Sentinel Landscape



“This is a win-win for both the Atlantic Test Ranges at NAS Patuxent River and the surrounding environment. Designating the Nanticoke Corridor as a Sentinel Landscape maintains our unique flight test and evaluation capabilities at the Atlantic Test Ranges while protecting important habitats for imperiled wildlife species and preserving agricultural land in the area.”

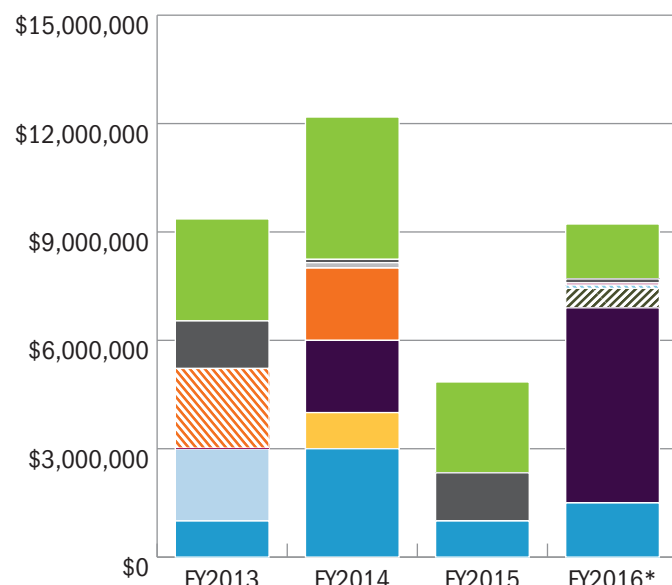
— Capt. Heidi Fleming, Commanding Officer at
NAS Patuxent River

This Sentinel Landscape can be considered the most “urban” of the six designated landscapes; despite its historic agricultural and fishing traditions and rural areas, it is no more than two hours driving distance from Washington, DC and is a coveted location for weekend or summer homes. This dynamic presents a challenge for the partners within the Sentinel Landscape, whose individual missions can conflict with unfettered development. Therefore, the goals of the Middle Chesapeake key in on protecting the most critical areas for wildlife, agricultural production, and the Navy’s mission.

Over 150,000 critical testing and research flights are conducted annually within the Navy’s Special Use Airspace in the Sentinel Landscape. This averages out to more than 410 aircraft

operations occurring per day out of NAS Patuxent River, helping to test, evaluate, and prove the safety of planes, helicopters, and equipment that will be used in combat. Because these activities create noise and have accompanying safety risks, they are mostly conducted in airspace over open water; however, flying over islands and peninsulas to and from the installation,

Middle Chesapeake: Total Funding by Partner



	FY2013	FY2014	FY2015	FY2016*
NRCS-EQIP	\$2,822,600	\$3,938,100	\$2,514,300	\$1,521,000
NRCS-CSP	\$1,315,800	\$92,600	\$1,331,000	\$112,300
NRCS-CBWI	\$2,203,400	\$-	\$-	\$-
NRCS-AMA	\$18,400	\$-	\$2,700	\$51,900
USFWS	\$-	\$150,000	\$-	\$25,000
Lower Shore Land Trust	\$-	\$-	\$-	\$70,000
St. Mary's County, MD	\$-	\$-	\$-	\$540,000
State of Delaware	\$-	\$2,000,000	\$-	\$-
State of Maryland	\$-	\$2,000,000	\$-	\$5,400,000
Chesapeake Conservancy	\$-	\$1,000,000	\$-	\$-
U.S. Navy	\$2,000,000	\$-	\$-	\$-
DoD REPI Program	\$1,000,000	\$3,000,000	\$1,000,000	\$1,500,000
Total	\$9,360,200	\$12,180,700	\$4,848,000	\$9,220,200

*FY16 funding includes commitments through August 29, 2016.

Middle Chesapeake: Goals and Outcomes

Goal	Status
Goal #1 Protect more than 150,000 annual aviation Research, Development, Test, and Evaluation operations from NAS Patuxent River by ensuring continued use of 1,505,687 acres of Special Use Airspace and 743,194 acres of Helicopter Operating Areas.	5,100 acres protected to date.
Goal #2 Prevent the conversion of working lands to non-agricultural uses and improve water quality, supporting local fisheries by preserving 2,000 acres of working lands in perpetuity and providing technical assistance to farmers. Create connected corridors of working lands with prime agricultural soil and existing forest cover.	2,000 acres of farmland preserved to date; 508 active or completed contracts with farmers and landowners to provide assistance with the planning and implementation of land and water management practices.
Goal #3 Conserve and protect land in the Chesapeake Bay watershed (in accordance with EO 13508), including the pristine character of the Nanticoke River and St. Mary's River watersheds. Improve habitat and increase natural defenses against the effects of sea-level rise. Create an 8,500 acre protected wildlife corridor. Expand public access to the Bay and its rivers.	Status: 2,800 acres of pristine forests and 300 acres of wetlands conserved to date.

Middle Chesapeake: Partners

Commonwealth of Virginia
DoD REPI Program
DOI National Park Service
DOI U.S. Fish and Wildlife Service
Eastern Shore Land Conservancy
Lower Shore Land Trust
Northern Neck Land Conservancy
Patuxent Tidewater Land Trust
Southern Maryland Resource Conservation and Development Board
St. Mary's County
State of Delaware
State of Maryland
The Chesapeake Conservancy
The Conservation Fund
The Nature Conservancy
Trust for Public Land
USDA NRCS
USDA Forest Service

conducting low-altitude flight tests, and flying at night are all unavoidable and necessary parts of the Navy's mission. Therefore, the Navy has a vested interest in protecting land underneath airfield approaches and other critical flight paths.

While residential and commercial development on land located underneath protected airspace is inherently incompatible with NAS Patuxent River's mission, wildlands and working lands are excellent neighbors for the installation. Through the Sentinel Landscape partnership, USDA NRCS, the U.S. Forest Service,



The rural farming landscape underneath the Atlantic Test Ranges supports test flights of the F-35B Joint Strike Fighters under evaluation at NAS Patuxent River. This flight tested the F-35B's structural loads and handling qualities during maneuvering flight.

and Delaware's Agricultural Land Preservation Foundation have been able to protect 2,000 acres of working lands within the Sentinel Landscape and provide technical assistance to landowners to help improve water quality. These lands are helping to create connected corridors of working lands with prime agricultural soil and forest cover, which also benefits the Chesapeake Bay watershed and improve the pristine character of the Nanticoke River and St. Mary's River watersheds.

NEW DESIGNATIONS

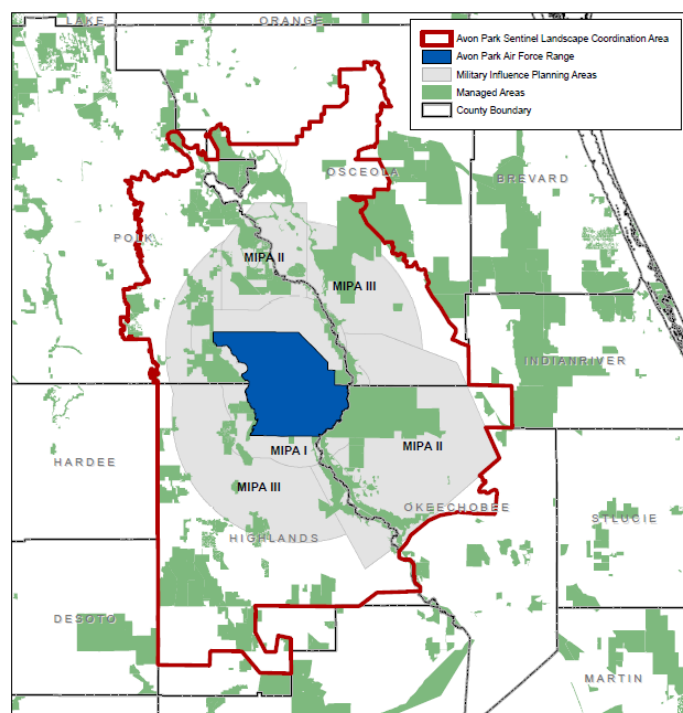
In July 2016, the Sentinel Landscapes FCC designated three new Sentinel Landscapes at Avon Park AFR in Florida, Camp Ripley in Minnesota, and in Eastern North Carolina. The newly designated landscapes each demonstrate the shared vision of the Sentinel Landscapes Partnership and a different path to achieving mutually-beneficial goals.

AVON PARK AFR

The Avon Park AFR Sentinel Landscape encompasses the Everglades Headwaters National Wildlife Refuge and Conservation Area as well as the Air Force's largest air-to-ground training range east of the Mississippi River.

Sentinel Landscape partners will seek to: prevent or avoid incompatible land uses near the installation; protect the integrity and viability of cattle ranches, citrus farms, croplands, and working forests; preserve habitat for migratory birds, native wildlife, and Federal and state species of concern; contribute

Avon Park AFR Sentinel Landscape





Lake Hatchineha in the Everglades Headwaters National Wildlife Refuge & Conservation Area. (Photo courtesy of the Everglades Headwaters NWR)

to the water quality, quantity, and storage capacity of the upper Everglades watershed, which is a primary drinking water supply source for central and south Florida; increase opportunities for hunting, fishing, and other recreation activities; and invest in the long-term sustainability and economic viability of the area.

Avon Park AFR: Goals

Goal
Goal #1 Prevent or avoid incompatible land uses near APAFR through innovation and partnerships. Protect annual dispatch of over 14,000 sorties and over 200 ground training events.
Goal #2 Protect the integrity and function of working landscapes and ensure opportunities for viable agricultural activities on working lands threatened by conversion to other uses.
Goal #3 Provide effective habitat connections between existing conservation areas that will allow habitats and species to shift in response to urban development pressures and global climate change.
Goal #4 Protect habitats to support migratory birds, federal and state listed species, state designated species of special concern, and native wildlife diversity.
Goal #5 Contribute to the water quality, water quantity, and water storage capacity of the upper Everglades watershed to support Everglades restoration goals and objectives, and water quality and supply for central and south Florida.
Goal #6 Increase opportunities for hunting, fishing, wildlife observation, wildlife photography, and other passive recreation activities.
Goal #7 Invest in the long-term sustainability and economic viability of the area through a sentinel landscapes designation.

Avon Park AFR: Partners

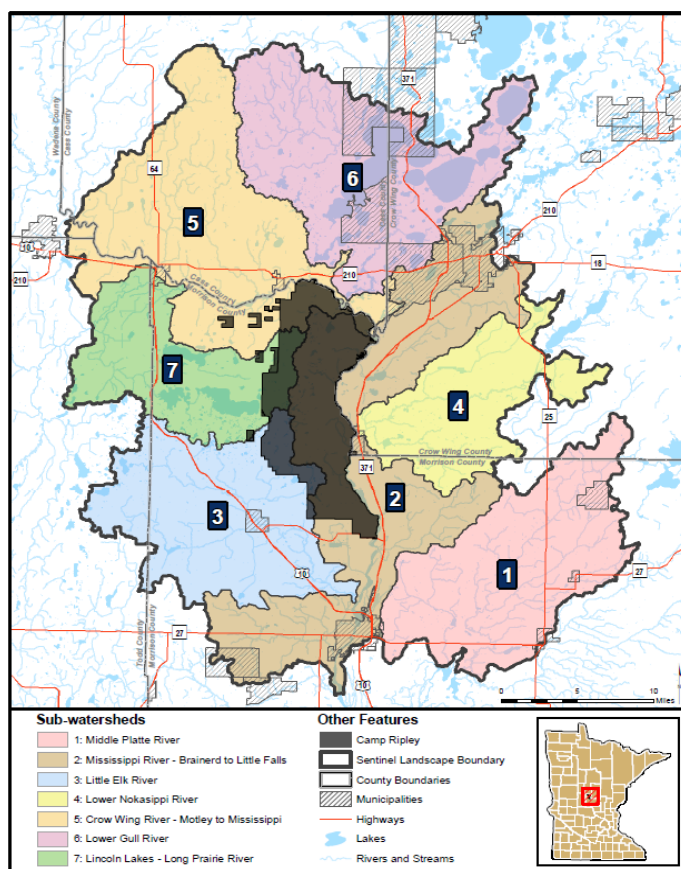
American Farm Bureau Federation
 Central Florida Regional Planning Council
 DoD Office of Economic Adjustment
 DoD REPI Program
 DOI U.S. Fish and Wildlife Service
 Florida Audubon
 Florida Defense Alliance
 Florida Defense Support Task Force and Grants
 Florida Department of Agriculture and Consumer Services
 Florida Department of Environmental Protection
 Florida Department of Transportation
 Florida Fish and Wildlife Commission
 Florida Wildlife Association
 Highlands County
 National Cattlemen's Beef Association
 National Wildlife Refuge Association
 Okeechobee County
 Osceola County
 Polk County
 South Florida Water Management District
 The Conservation Fund
 The Forestry Association
 The Nature Conservancy
 The Trust for Public Land
 University of Florida
 USDA NRCS
 USDA Forest Service

CAMP RIPLEY

The Camp Ripley Sentinel Landscape is located in a historically rural and agricultural part of central Minnesota at the convergence of seven watersheds feeding into the Mississippi River. The installation is the primary National Guard Training Center for units from Minnesota, North Dakota, South Dakota, Wisconsin, Iowa, Ohio, and Illinois, and conducts training year-round.

Within the Sentinel Landscape, partners intend to: protect the training capabilities of Camp Ripley, including 45 live-fire ranges and additional artillery, improvised explosive device (IED), and aircraft assets; work with local farmers to reduce the amount of nitrogen run-off from agricultural production; conserve land within targeted minor watersheds to improve water quality; and protect habitat for the Federally-listed Northern long-eared bat.

Camp Ripley Sentinel Landscape



Camp Ripley: Partners

Army Compatible Use Buffer Program
 Cass County
 City of Baxter
 Crow Wing County
 DOI U.S. Fish and Wildlife Service
 DoD REPI Program
 Minnesota Board of Soil and Water Resources
 Minnesota Department of Agriculture
 Minnesota Department of Military Affairs
 Minnesota Department of Natural Resources
 Minnesota Forest Resources Council
 Mississippi Headwaters Board
 Morrison County
 Morrison Soil and Water Conservation District
 The Nature Conservancy
 USDA NRCS
 USDA Forest Service

Camp Ripley: Goals

Goal

Goal #1 Protect 45 live-fire training ranges.

Goal #2 Work with farmers in accordance with the Minnesota Nitrogen Fertilizer Management Plan 2015 to reduce the amount of Nitrogen per implementation of best practice per minor watershed.

Goal #3 Achieve 50% restoration and protection status in targeted minor watersheds to improve water quality and protect habitat for migratory birds, pollinators/monarch butterfly and the Federally listed Northern long-eared bat.

Goal #4 Provide technical and financial assistance as needed to restore or enhance wildlife habitat on 200 acres of private lands per year through the Partners for Fish and Wildlife Program.

Goal #5 Acquire additional lands in the approved boundary of Crane Meadows National Wildlife Refuge from willing sellers as available.



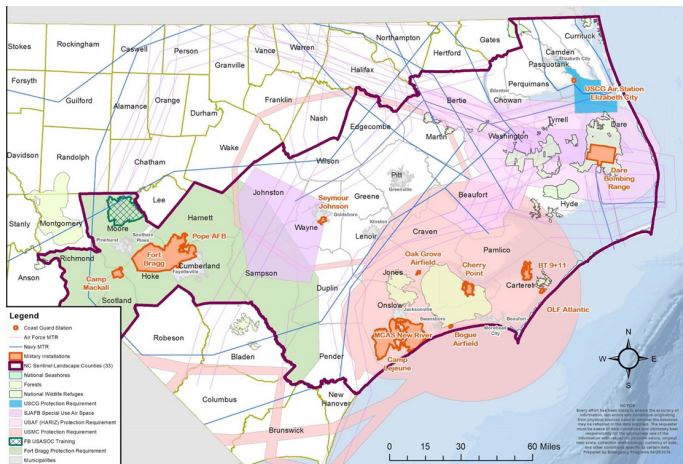
Over 40 miles of the Mississippi River headwaters flow through the Camp Ripley Sentinel Landscape, and are fed by 34 minor watersheds in a 10-mile radius of the installation. (Photo courtesy of Camp Ripley)

EASTERN NORTH CAROLINA

The Eastern North Carolina Sentinel Landscape is unique, owing to its incorporation of multiple anchor installations across the eastern part of the state, including Fort Bragg, Dare County Bombing Range, Marine Corps Base (MCB) Camp Lejeune, Marine Corps Air Stations Cherry Point and New River, and Seymour Johnson Air Force Base (AFB).

Through targeted projects, the broad Sentinel Landscape partnership coalition will seek to: protect aviation training approaches to Seymour Johnson AFB and Dare County Bombing Range; prevent the conversion of privately-owned farm, forest, and wildlands to incompatible land uses; help landowners develop best-practice management plans; create high-quality habitat for the Federally endangered red-cockaded woodpecker outside of MCB Camp Lejeune; and bring healthy food options sources from local producers to military installations.

Eastern North Carolina Sentinel Landscape



Eastern North Carolina: Goals

Goal

Goal #1 Protect aviation training approaches to Seymour Johnson AFB and Dare County Bombing Range and promote compatible land uses near installation boundaries.

Goal #2 Create high-quality habitat for the Federally endangered red-cockaded woodpecker outside MCB Camp Lejeune.

Goal #3 Establish and enhance longleaf pine forests on private lands.

Goal #4 Encourage privately owned lands to remain in agriculture production, forestry, and wildlife habitat.

Goal #5 Help landowners develop best-practice management plans.

Goal #6 Prevent the conversion of agricultural land into incompatible residential or commercial land use.

Goal #7 Bring healthy food options sourced from local producers to military installations.

Eastern North Carolina: Partners

Albemarle-Pamlico National Estuary Partnership
 Bragg Alliance
 Brooks, Pierce, McLendon, Humphrey & Leonard, LLP
 Conservation Trust for North Carolina
 DoD REPI Program
 DOI US Fish and Wildlife Service
 Duke University
 Elon University
 Environmental Defense Fund
 Joint Expeditionary Base Little Creek-Fort Story
 National Fish and Wildlife Foundation
 NC East Alliance
 North Carolina Association of Soil & Water Conservation Districts
 North Carolina Coastal Land Trust
 North Carolina Department of Agriculture and Consumer Services
 North Carolina Department of Commerce
 North Carolina Department of Military and Veterans Affairs
 North Carolina Department of Natural and Cultural Resources
 North Carolina Department of Transportation
 North Carolina Farm Bureau Federation
 North Carolina Forestry Association
 North Carolina Foundation for Soil & Water Conservation
 North Carolina Grange
 North Carolina Land of Water
 North Carolina Military Business Center
 North Carolina State University
 North Carolina Wildlife Resources Commission
 South Atlantic Landscape Conservation Cooperative
 Southern Group of State Foresters
 Texas A&M University
 The Coastal Land Trust
 The Conservation Fund
 The Nature Conservancy
 Tyrrell County
 University of North Carolina at Chapel Hill
 USDA Farm Service Agency
 USDA Forest Service
 USDA NRCS

LOOKING AHEAD

Due to the success of partnerships at designated Sentinel Landscapes, the FCC has created an application process for future designations that is open to all eligible entities interested in advancing mutually beneficial working lands, natural resources, and military mission protection goals. Any entity whose mission aligns with or otherwise supports the goals of the Sentinel Landscapes Partnership is eligible to submit an application. Examples of eligible entities include but are not limited to: Federal agencies; state and local governments; Federally-recognized American Indian tribes; for-profit and not-for-profit organizations or associations with conservation, agricultural, or silvicultural missions; municipal water treatment entities; water irrigation districts; and soil conservation districts. Eligible partners are not limited to the list of eligible applicants, but if named in the submitted application they will be required to submit a signed letter of commitment to verify engagement.

For competitive consideration, potential Sentinel Landscapes will be required to show evidence of advanced planning, engagement, and compatible management strategies. Applicants will be required to possess the core characteristics of a Sentinel Landscape outlined in this Report, identify locally-driven desired end goals, delineate Sentinel Landscape boundaries, and establish a process for coordination and implementation prior to submitting their application for designation. All Sentinel Landscapes will be required to submit quantitative and qualitative data measuring accomplishments towards desired end goals on an annual basis, which will be used by the FCC to measure progress and re-validate a landscape's designation for the coming year.

Applications will be submitted online at WWW.SENTINELLANDSCAPES.ORG, and reviewed by the FCC. New designations will be determined by consensus, with up to three designations made annually.

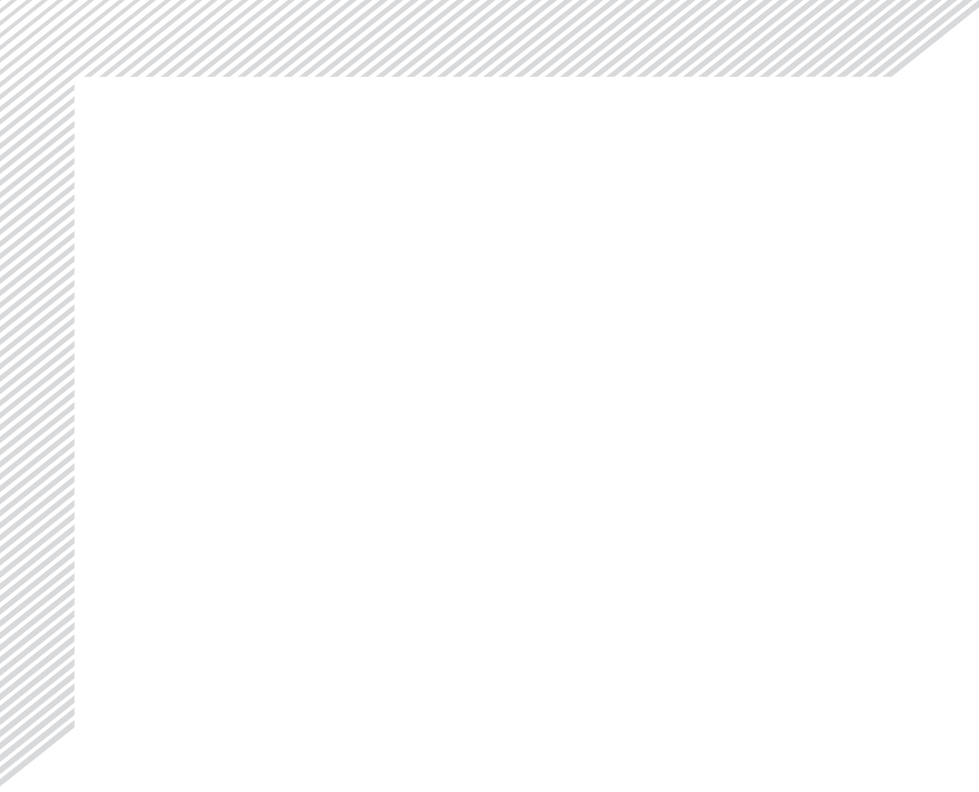
Interested parties are encouraged to begin coordinating locally and download the application, available at WWW.SENTINELLANDSCAPES.ORG. Any questions about the application process, or Sentinel Landscapes in general, can be directed to the FCC through the website.



U.S. Marines conduct fast rope training from an MV-22 Osprey over Camp Lejeune. (Photo courtesy of the U.S. Marine Corps)

“Not only does the collaboration around Avon Park, Camp Ripley, and throughout Eastern North Carolina ensure the continued availability of critical military installations and ranges, but this partnership also preserves working lands that provide food and fiber to our nation, and sustains key natural resources that help to ensure water quality and provide climate change resilience. The Sentinel Landscapes Partnership is an innovative initiative that protects critical DoD missions through efficient government and private sector collaboration. This is a true win for warfighters and taxpayers.”

— Peter Potochney, Principal Deputy Assistant Secretary of Defense for Energy, Installations, and Environment





SENTINEL LANDSCAPES 2016 REPORT